

5/25

Split B


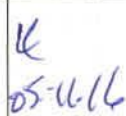

DART AEROSPACE LTD	Work Order:	23340 B
Description: Wearplate	Part Number:	D3319-1
Dwg: D3319 Rev. A page 1	Qty:	30
		Page 1 of 1

Step	Location	Procedure	By	Date	Qty
1	DC	Issue Traveler	HA	05.06.13	30
2	PG	Issue P/O: <u>2008792</u> Email or Ship DXF file to vendor Laser Cut flat pattern per Dwg D3319 Possible Supplier: Industrial Laser Material release note is required	HA	05/10/11	30
3	RG	Receive and inspect for transit damage Ensure material release note is attached	CL	05/10/25	31
4	QC6	Inspect dimensions as per inspection template D3319-1T1	J	05-11-16	30
5	GA	Deburr if necessary	N/A		
6	GB	Form using DT8326 & DT8261 as per Dwg D3319 Dwg Rev: <u>B</u>	SB	05/11/17	30
7	GB	Form flat on press using DT8776 block Dwg Rev: <u>B</u>	SB	05/11/17	30
8	QC6	Inspect dimensions as per Dwg D3319	HA	05/11/23	30
9	WS	Weld hard surface using D3319-1T2 as per QSI 004 and Dwg D3319 Dwg Rev: <u>D</u> Qty Part Number Description Batch A/R N/A 7560 Hardcoat Rod <u>M/9122</u>	CPL	05-12-12	26
10	QC9	Inspect weld	HA	05/12/12	26
11	FP	Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3	FC	05 12 20	26
12	QC3	Inspect Powder Coat	HA	05 12 20	26
13	ST	Identify on inside surface using a permanent fine point marker with the following: TCCA-PDA, Dart Aerospace Ltd. P/N: D3319-1, B/N: BXXXXX For Product Eligibility see PDA04-18 and Stock	CL	05/12/22	26
14	AC	Cost / part: _____	HA	05/12/22	26
15	DC	Close W/O Inspect Level 21	HA	05/12/22	26

PTO

Rev	Date	Change	Revised By	Approved
A	05.05.12	New issue	KJ/JLM	

PRELIMINARY ISSUE

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector
05-11-16	4	Took one for template (New Rev.)		05-11-16	1	 05-11-16	 05-11-16

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

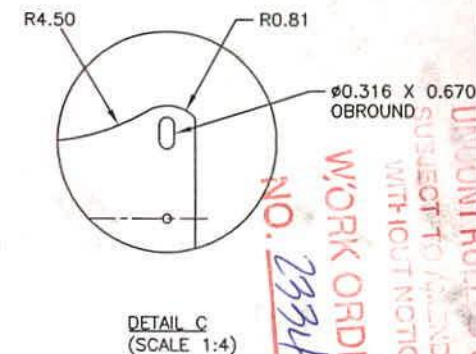
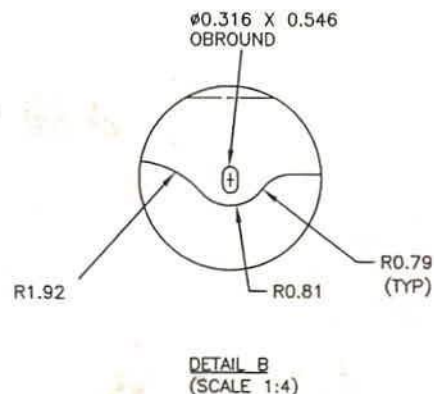
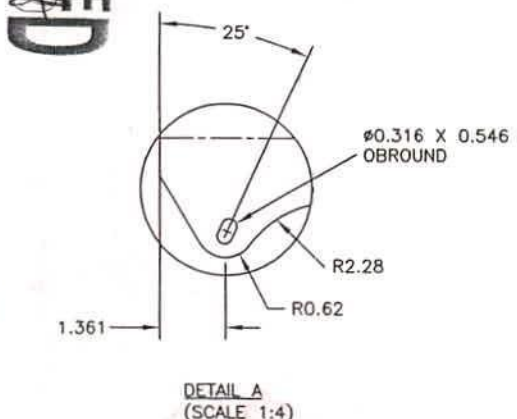
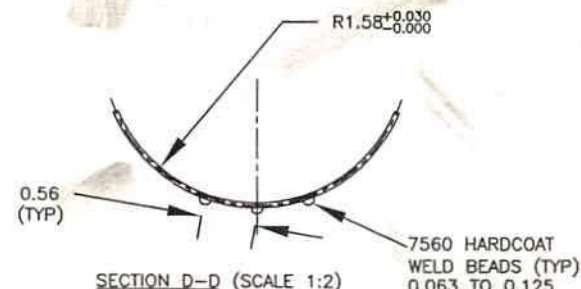
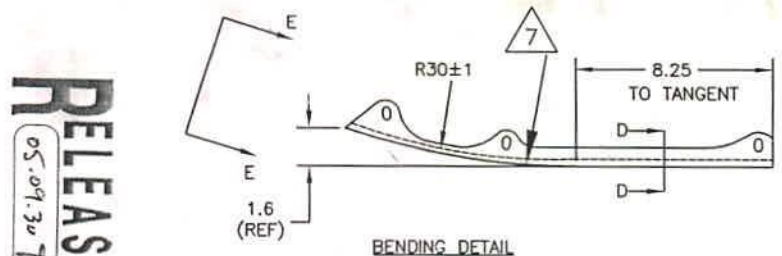
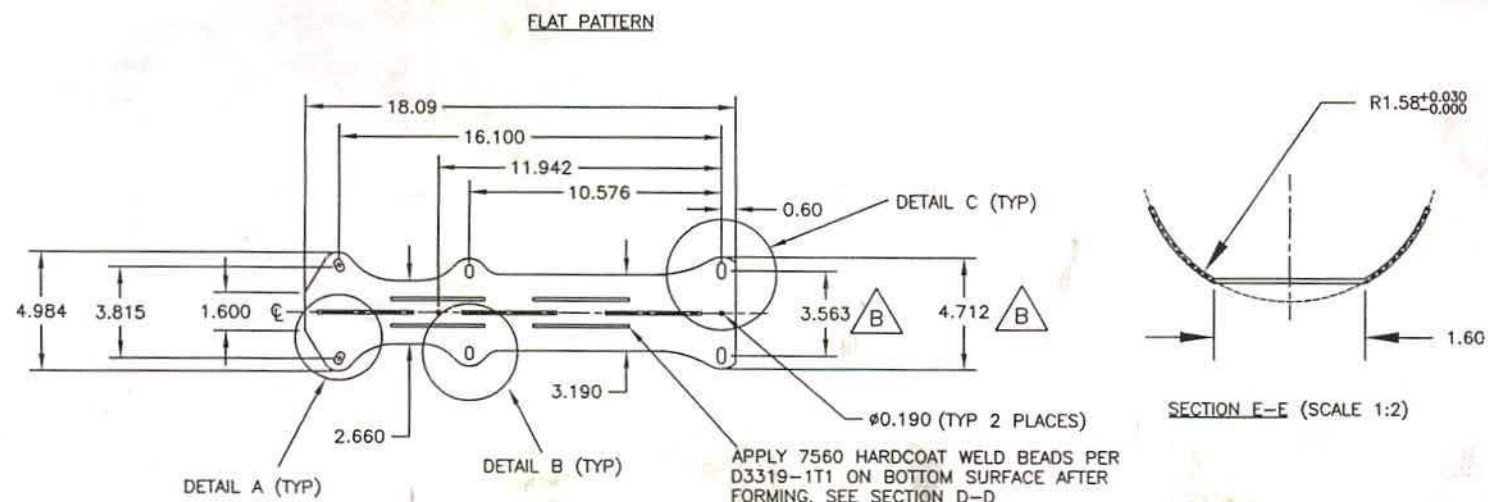
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA:  Date: 06/01/03

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

DART

DESIGN	P41	DRAWN BY	P41	DART AEROSPACE LTD HAMKESBURY, ONTARIO, CANADA	
CHECKED	[Signature]	APPROVED	[Signature]	DRAWING NO.	D3319
DATE	05.06.06			TITLE	WEARPLATE FOR COPY
					WIDEN HOLES, REDUCE WIDTH -3/-5/-7
				SCALE	1:8



D3319-1 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-1 B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-18"

RELEASED
05.09.30

WORK ORDER
NO. 23340

SUBJECT TO AGREEMENT
WITHOUT NOTICE

Job Costing Report

Dart Aerospace Ltd.
Hawkesbury

May 17, 2005
10:51 am

Work Order No : 0023340
Project Name : D3319-1
Project For : WK525
Work Order Type : Main
Main WO Number :
House Part Number : D3319-1
Description : Wearplate
Manufactured : Yes
Amount Req'd : 30
Amount Done : 0
Start Date : 05-17-05
Est Finish Date : 06-30-05
Act Finish Date :
Drawings Req'd : No
Ok for Approval :
Approval Rec'd :

Department Code:
Burden Flags : NNNNNNNN
WO Status : Open
Invoice State : Not Invoiced
Invoice Date :
Invoice Number :
Invoice Amount : 0.00
Order Entry No :
OE Value : 0.00
Est Mark Up : 0.000%
Actual Mark Up : 0.000%
\$0 Posted to Finished Goods


	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	0.00	0.00		
Mark up :	0.000	0.000			
Selling Cost :	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00



California Steel Industries
14000 San Bernardino Ave.
Fontana, California 92335
Ph (909) 350-6300

CERTIFIED TEST REPORT

CUSTOMER ORDER P50614ME002		MO. NUMBER 02-8344-01	SHIPPING DATE 08/01/05	CAR NUMBER RR: WCTR142061	TALLY NUMBER PO 250499136 1/																			
B I L L T O	WILKINSON STEEL AND METALS A DIVISION OF PREMETAL CO., INC. 888 S.E. MARINE DR., VANCOUVER BC, CANADA, V5X2V3		S H I P T O	WILKINSON STEEL-METALS C/O GARY R. HAMILTON TRUCKING 888 S.E. MARINE DR., VANCOUVER BC, CANADA BC V5Y 2																				
MARK ALL DOCUMENTS W/P.O. P50614ME002. FAX TALLIES AT TIME OF SHIPMENT TO MEL ELIAS FAX #604-301-3244.																								
END USE	WAREHOUSE STOCK - NON-CRITICAL SURFACE																							
PROD	H.R. COILS - P & O - PRIME																							
SPEC	ASTM-A-1011-00-CS-TYPE B																							
T/R 1	INSPECTION MILL																							
DESCRIPTION		COILS, PIECES OR BUNDLES	HEAT NUMBER																					
.0605 x 48.0000 x COIL NOM ME		1 1	T42354 T42348																					
				I CERTIFY THE FOLLOWING TEST INFORMATION TO BE CORRECT AS CONTAINED IN THE RECORDS OF THE COMPANY.  CHIEF - LABORATORY SERVICES																				
MECHANICAL PROPERTIES																								
HEAT OR LOT NUMBER	SLAB NUMBER	L O C	YIELD KSI	TENSILE STRENGTH KSI	% ELONGATION 8" 2"	BEND TEST	CHEMICAL ANALYSIS														10:48:05 08/01/05 CC			
T42354							C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al	V	Co	Ti	N				
T42348							08	.39	010	006	006	01	01	01	00	050	000	000	000	002				
							08	.38	014	010	007	01	01	01	00	046	000	000	001	003				
CTR-001 PTLUC22L 990712																								



New Zealand Steel Limited
Glenbrook, South Auckland
Postal: Private Bag 92121, Auckland, New Zealand
Telephones: (09) 375 8999 / 375 8111 Auckland
(09) 235 8059 / 235 3535 Waikato
Fax: (09) 375 8959

TEST CERTIFICATE

Ref: 521022495

CUSTOMER		Wilkinson		50323P1001		SPECIFICATION		ASTMA1008 CS Type A		CERTIFICATE No		TC112396												
CUSTOMER O/N		90-21N-686				PRODUCT		CRA WIDE COIL		PAGE		1 of 1												
MILL O/N		480736				DIMENSIONS		0.844" x 48" x Coil		DATE		09 June 2005												
PACK NUMBER	HEAT No	CHEMICAL COMPOSITION PERCENT															MECHANICAL TESTS (TEST SPECIFICATION - ASTM A370)							
		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	Al	B	N2	CE ()	BEND	YIELD	T.S.	%ELONG	HARDNESS	r	LENGTH
		x100				x1000											x10000	x100	180°				G.L.=	HRB
R9-460748-00	642185	5	TR	20	7	16	11	17	19	1	4	1	1					Good				50		1968
R9-460749-00	642185	5	TR	20	7	16	11	17	19	1	4	1	1					Good				50		1913
R9-461119-00	642185	5	TR	20	7	16	11	17	19	1	4	1	1					Good				47		1926
R9-461120-00	642185	5	TR	20	7	16	11	17	19	1	4	1	1					Good				47		1713

YIELD		GAUGE LENGTH (G.L.)		PLASTIC STRAIN RATIO (r)		IMPACT TEST		CARBON EQUIVALENT VALUE (CE)	
(A)=0.2% PROOF STRESS	(A)=200mm	(C)=80mm	(E)=2"	(A)=r0	(C)=r45	(A)=10mm x 10mm	(C)=5mm x 5mm	(A)=C+Mn/6	(C)=C+Mn/6+Si/24
(B)=LOWER YIELD STRESS	(B)=50mm	(D)=5.65 x So	(F)=8"	(B)=r90	(D)=(r0+r90+2r45) / 4	(B)=7.5mm x 10mm	(D)=2.5mm x 10mm	(B)=C+Mn/6+(Cr+V+Mo)/5+(Cu+Ni)/15	(D)=

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND INSPECTED
WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION

APPROVED *Satish Misra*
QC METALLURGIST

Job Costing Report

Dart Aerospace Ltd.
Hawkesbury

Nov 08, 2005
10:23 am

Work Order No : 0023340
Project Name : D3319-1
Project For : WK525
Work Order Type : Main
Main WO Number :
House Part Number : D3319-1
Description : Wearplate
Manufactured : Yes
Amount Req'd : 30
Amount Done : 0
Start Date : 05-17-05
Est Finish Date : 06-30-05
Act Finish Date :
Drawings Req'd : No
Ok for Approval :
Approval Rec'd :

Department Code:
Burden Flags : NNNNNNNN
WO Status : Open
Invoice State : Not Invoiced
Invoice Date :
Invoice Number :
Invoice Amount : 0.00
Order Entry No :
OE Value : 0.00
Est Margin : 0.000%
Actual Margin : 0.000%
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	186.00	100.00	0.00	186.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	186.00	100.00		
Margin :	0.000	0.000			
Selling Cost :	0.00	186.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	(-186.00)

MIS 2/B
11-15

Date: Monday, 14/11/2005 3:30:52 PM
 User: Alba Panzuto

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: WEARPLATE
Job Number	: 23340		
Estimate Number	: 10437		
P.O. Number	:	Part Number	: D33191
This Issue	: 14/11/2005 S.O. No. :	Drawing Number	: D3319 REV. B
Prsht Rev.	: NC	Project Number	:
First Issue	: / / Type : PURCHASED PARTS	Drawing Revision	: B
Previous Run	:	Material	:
Written By	:	Due Date	: 30/11/2005 Qty: 30 Um: Each
Checked & Approved By	:		
Comment	: Est: B 05.10.14 Added step 9, dwg rev B KJ/EC		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: PURCHASING

Issue P/O: _____
 Email or Ship DXF file to vendor
 Laser Cut flat pattern per Dwg D3319
 Possible Supplier: Industrial Laser
 Material release note is required

2.0	D33191	Wearplate
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3.0	PACKAGING 1	PACKAGING RESOURCE #1
-----	-------------	-----------------------



Comment: PACKAGING RESOURCE #1

Recieve & Inspect for Transit Damage
 Ensure Material Release Note is attached

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
-----	-------------	-------------------------------



Comment: SMALL & MEDIUM FAB RESOURCE 1

Deburr if necessary

6.0	BRAKE NC	NC BRAKE
-----	----------	----------



Comment: NC BRAKE

1- Form using DT8326 & DT8261 as per Dwg D3319 Rev: _____
 2- Form flat on press using DT8776 block

Date: Monday, 14/11/2005 3:30:52 PM
User: Alba Panzuto

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 23340

Part Number: D33191

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

7.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

8.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1- Layout weld location as per Dwg D3319 using jig D3319-1T3

2- Weld hard surface using D3319-1T2 per QSI 004 and Dwg D3319 Rev: ____

Qty	Part Number	Description	Batch
-----	-------------	-------------	-------

A/R	N/A	7560 Hardcoat Rod	
-----	-----	-------------------	--

9.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

10.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

12.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify on inside surface using a permanent fine point marker with the following:

TCCA-PDA, Dart Aerospace Ltd.

P/N: D3319-1, B/N: BXXXXX

For Product Eligibility see PDA05-18

and Stock

Location: _____

13.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

Job Completion

